

JULY 5.

The President, Dr. RUSCHENBERGER, in the chair.

Seventeen persons present.

A paper entitled, "The Snare of the Ray Spider, *Epeira radiosa*, a new form of Orb-web," by Rev. H. C. McCook, D. D., was presented for publication.

*Sarcodes sanguinea*.—Mr. THOMAS MEEHAN referred to discussion among members at former meetings, as to the true character of parasitic plants. They were believed to be in the main of two classes,—one which might be represented by the common mistletoe, with woody stems continuing from year to year,—the other like the *Arceuthobium*, or pine parasite, which died to the surface of the wood, but continued to grow up from the same spot every year—a sort of parasitic herbaceous plant. It was a question how far root parasites partook of these several characters. There were some plants, as *Castilleja* and *Comandra*, which might be said to be in a transition state between an ordinary terrestrial plant and a parasite. Usually they were as other plants, but some of the roots would attach themselves to other roots, and form as perfect a union as genuine parasites, and, by the decline in vigor of the victim root beyond the point of union, evidently showed they were really parasitic, deriving nourishment from the attachment. *Aphyllon uniflorum*, germinated on the annual fibrous roots of Asters and Solidagoes, as had been clearly traced, and perhaps on other plants; and after germination formed a mass of innumerable coral-like spongelets, drawing moisture and perhaps some other elements of nutrition from the surrounding medium. *Epiphegus Virginiana* behaved precisely in the same way. *Monotropa* and others had also this mass of pseudo-roots, or spongelets, and had been supposed to germinate and live wholly on half decayed vegetation, but he believed from analogy they would be found, as in *Epiphegus* and others, to germinate at first on living roots. *Conopholis* was the only root parasite he had found any reason for believing to be a perennial. This had been found attached to quite large roots, evidently coming up from the same spot from year to year as *Arceuthobium* does.

Having correspondents in regions where grows the beautiful Snow-plant of the Sierras—*Sarcodes sanguinea*—about which nothing but its aerial character has been so far known, he had set them to watching for him, their appearance and final end. The places where they grew were carefully marked, and with the following results:—Mr. John M. Hutchings, of Yosemite, found the bottom of the old plants 10 to 14 inches below the surface, with not the slightest signs of attachment anywhere. To him it ap-